

REMARKS

Favorable reconsideration and allowance of the claims of the present application are respectfully requested.

In the present Office Action, Claims 66, 67, 78 and 79 are objected to because of minor informalities which are detailed in the present Office Action. In response to the claim objections, applicants have amended Claims 65, 66, 67, 76, 78 and 79 in the manner indicated *supra*. Applicants have also cancelled Claim 80 since that claim appears to be a duplicate of Claim 76.

Applicants respectfully submit that the above amendments to Claims 65, 66, 67, 76, 78 and 79 obviate the informal objections to the claims raised in the present Office Action. As such, applicants respectfully request reconsideration and withdrawal of the instant claim objection.

In addition to the above amendments to the claims, applicants have also amended Claims 56, 69, 71 and 72; Claim 58 has been cancelled. With respect to Claim 59, applicants have amended the claim to positively recite that *the first single crystal semiconductor region and the second single crystal semiconductor region are both disposed on a common buried insulating layer that lays atop a substrate*. In a similar manner, Claim 69 has been amended to positively recite that *the at least one single semiconductor region and the at least one bilayer semiconductor region are both disposed on a common buried insulating layer, said insulating layer is located on a substrate*. Support for these amendments to Claims 56 and 69 is found throughout the specification of the instant application. See, for example, paragraph [0011] as well as the drawings that are representative of the claimed invention. Claims 71 and 72 were amended to include language that had proper antecedent basis in Claim 69.

Since the above amendments to the claims do not introduce any new matter into the instant application, entry thereof is respectfully requested.

Claim 56<sup>1</sup> stands rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 4,768,076 to Aoki et al. ("Aoki et al."). Claims 56-69 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by applicants' own Admission of the prior art ("AAPA"). Claims 70 and 71 stand rejected under 35 U.S.C. § 103 as allegedly obvious from AAPA.

Concerning the § 102(b) rejections, it is axiomatic that anticipation under § 102 requires that the prior art reference disclose each and every element of the claim to which it is applied. In re King, 801 F.2d, 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1996). Thus, there must be no differences between the subject matter of the claim and the disclosure of the prior art reference. Stated another way, the reference must contain within its four corners adequate direction to practice the invention as claimed. The corollary of the rule is equally applicable: Absence from the applied reference of any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

Applicants respectfully submit that the structure recited in Claim 56 of the present application is not anticipated by the disclosure of Aoki et al. since the applied reference does not disclose *each and every element* of the claimed structure. Specifically, Aoki et al. do not disclose a structure including a *first single crystal semiconductor region and a second single crystal semiconductor region that are both disposed on a common buried insulating layer which lays atop a substrate*. In contrast, Aoki et al. disclose a semiconductor substrate which has a first substantially flat surface lying substantially parallel to a (100) plane; an insulating film formed on said first substantially flat surface; a semiconductor layer, which is deposited on said

---

<sup>1</sup> Applicants observe that in the present Office Action (item 6), the Examiner failed to specifically identify which claims were anticipated by Aoki et al. From the discussion that followed item 6, it appears that only Claim 56 was rejected. Hence, applicants have only address the rejection as it concerns Claim 56.

insulating film and recrystallized by laser irradiation, and which has a second substantially flat surface lying substantially parallel to a (110) plane; and source and drain regions of a n-channel MOS transistor formed at said first substantially flat surface of said semiconductor substrate, and source and drain regions of a p-channel MOS transistor formed at said second substantially flat surface of said semiconductor layer. Applicants observe that Aoki et al. do not disclose that the first and second semiconductor regions of different crystal orientation are both located on a *common buried insulating layer*. As such, the claimed structures of the present application are not anticipated by Aoki et al.

With respect to AAPA, applicants observe that the structures recited in the claims of the present application are not anticipated by the AAPA since AAPA does not disclose each and every element of the claimed structures. Specifically, AAPA does not disclose a structure including a *first single crystal semiconductor region and a second single crystal semiconductor region that are both disposed on a common buried insulating layer which lays atop a substrate*, nor a structure including *one single semiconductor region and at least one bilayer semiconductor region are both disposed on a common buried insulating layer, said insulating layer is located on a substrate*. Applicants observe that in the present application prior art FIGS. 1-3 show embodiments in which one of the semiconductor regions of different crystal orientation is located on a buried insulating layer, while the other semiconductor region is not. In prior art FIG. 4 of the present application, a common buried oxide 420 is shown, but the regions of different crystal orientation are not both disposed on layer 420. As such, AAPA does not anticipate the claimed structures.

The foregoing remarks clearly demonstrate that the applied references do not teach each and every aspect of the claimed invention, as required by King and Kloster Speedsteel; therefore the claims of the present application are not anticipated by the disclosures of Aoki et al. and

AAPA. Applicants respectfully submit that the instant §102 rejections have been obviated and withdrawal thereof is respectfully requested.

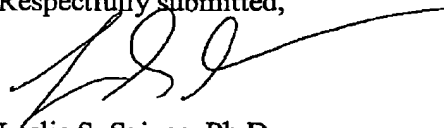
With respect to the § 103 rejection, applicants submit that the claims of the present invention are not rendered unpatentable by AAPA since AAPA does not teach or suggest applicants' claimed structure. AAPA, by itself, is defective since the applied reference does not teach or suggest structure in which the semiconductor regions of different crystal orientation are disposed on a common buried insulating layer. Applicants refer the Examiner to the above remarks concerning AAPA and thus those remarks are fully incorporated herein by reference.

The § 103 rejections also fails because there is no motivation in AAPA which suggests modifying the disclosed structure to include the various elements recited in the claims of the present invention. Thus, there is no motivation provided AAPA, or otherwise of record, to make the modification mentioned above. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Vaeck, 947 F.2d, 488, 493, 20 USPQ 2d. 1438, 1442 (Fed.Cir. 1991).

The rejection under 35 U.S.C. § 103 has been obviated; therefore reconsideration and withdrawal thereof is respectfully requested.

Thus, in view of the foregoing amendments and remarks, it is firmly believed that the present case is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



Leslie S. Szivos, Ph.D.  
Reg. No. 39,394

SCULLY, SCOTT, MURPHY & PRESSER, P.C.  
400 Garden City Plaza, Ste. 300  
Garden City, New York 11530  
(516) 742-4343

LSS:vh